# SHARP SERVICE MANUAL

No. S17B8LCC3242U



## LCD COLOR TELEVISION

MODEL LC-C3242U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

#### OUTLINE

This model is based on the LC-32D42U and is changed some parts. This Service Manual covers the modifications alone. For the other points, refer to the LC-32/37D42U Service Manual.

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Parts marked with " $\Lambda$ " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

## **DIFFERENCES FROM BASE MODEL**

### LIST OF CHANGED PARTS

Ref. No.	Description	LC-32D42U	LC-C3242U	Note				
PWB ASSEMBLIES								
	MAIN Unit	DUNTKD862FM04	←	_				
	R/C, LED Unit	DUNTKD909FM02	←	_				
	KEY Unit	DUNTKD910FM02	<b>←</b>	_				
	AV TERMINAL Unit	DUNTKD999FM04	<b>←</b>	_				
	POWER Unit	RDENCA198WJQZ	<b>←</b>	_				
LCD PANEI	<u>L</u>	·						
	32" WIDE LCD Panel Module Unit	R1LK315T3LZ4BX	R1LK315T3LZ50Z	_				
CABINET AND MECHANICAL PARTS								
Please refer to a Parts list.								
PACKING PARTS AND ACCESSORIES								
Please refer to a Parts list.								

#### SAFETY PRECAUTION

#### IMPORTANT SERVICE SAFETY PRECAUTION

■ Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

#### **■WARNING**

- For continued safety, no modification of any circuit should be attempted.
- 2. Disconnect AC power before servicing.

**CAUTION**: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE FUSE.

F7001 (250V 6.3A)

## ■BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

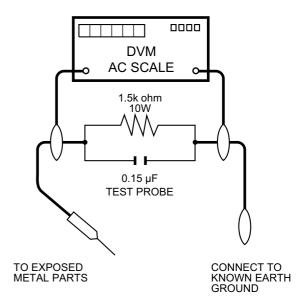
Before returning the receiver to the user, perform the following safety checks:

- Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
- Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
- To be sure that no shock hazard exists, check for leakage current in the following manner.
- Plug the AC cord directly into a 120 volt AC outlet.
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75 Vrms (this corresponds to 0.5 mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



### 

#### **SAFETY NOTICE**

Many electrical and mechanical parts in LCD color television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "\_^ " and shaded areas in the Replacement Parts List and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit.

The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

#### PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.

#### ■ AVERTISSEMENT

- N'entreprendre aucune modification de tout circuit. C'est dangereux.
- 2. Débrancher le récepteur avant toute réparation.

PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE

F7001 (250V 6.3A)

## ■ VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

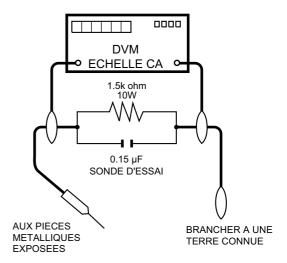
Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

- Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
- 4. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistancecapacité, les isolateurs mécaniques, etc.
- S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:
- Brancher le cordon d'alimentation directem-ent à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).

- A l'aide de deux fils à pinces, brancher une résistance de 1.5 kΩ
   10 watts en parallèle avec un condensateur de 0.15µF en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000Ω/V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance.
   Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)

La tension de pointe mesurèe ne doit pas dépasser 0.75V (correspondante au courant CA de pointe de 0.5mA).

Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



#### **AVIS POUR LA SECURITE**

De nombreuses pièces, électriques et mécaniques, dans les téléviseur ACL présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "\_\times" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.

Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

#### PRECAUTIONS FOR USING LEAD-FREE SOLDER

#### ■Employing lead-free solder

• "PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:





Indicates lead-free solder of tin, silver and copper.

Indicates lead-free solder of tin, silver and copper.

#### ■Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

#### ■Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220 °C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

PARTS CODE	PRICE RANK	PART DELIVERY	DESCRIPTION
ZHNDAi123250E	BL	J	φ0.3mm 250g (1roll)
ZHNDAi126500E	BK	J	φ0.6mm 500g (1roll)
ZHNDAi12801KE	BM	J	φ1.0mm 1kg (1roll)

#### LC-C3242U

### PRECAUTIONS IN SERVICING THE HDCP-KEY ROM

Applied part: HDCP-KEY ROM

IC8451 RH-IXB979WJQZY (updated ROM)

The HDCP-KEY ROM shall be protected and managed for its information inside. In servicing this ROM, therefore, take the following information protection/management measures.

1) When disposing of the component parts and PWBs, destruct the IC itself in a proper way. (For repairing or replacing the component parts and PWBs as well as clearing those in stock)

2) In storing the component parts, protect and manage them against theft and disclosure. (For storing the service parts, service units, etc.)

# SHARP PARTS GUIDE

No. S17B8LCC3242U

#### Note:

The reference numbers on the PWB are arranged in alphabetical order.

MODEL LC-C3242U

### CONTENTS -

- [1] LCD PANEL (NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.)
- [2] CABINET AND MECHANICAL PARTS
- [3] SUPPLIED ACCESSORIES

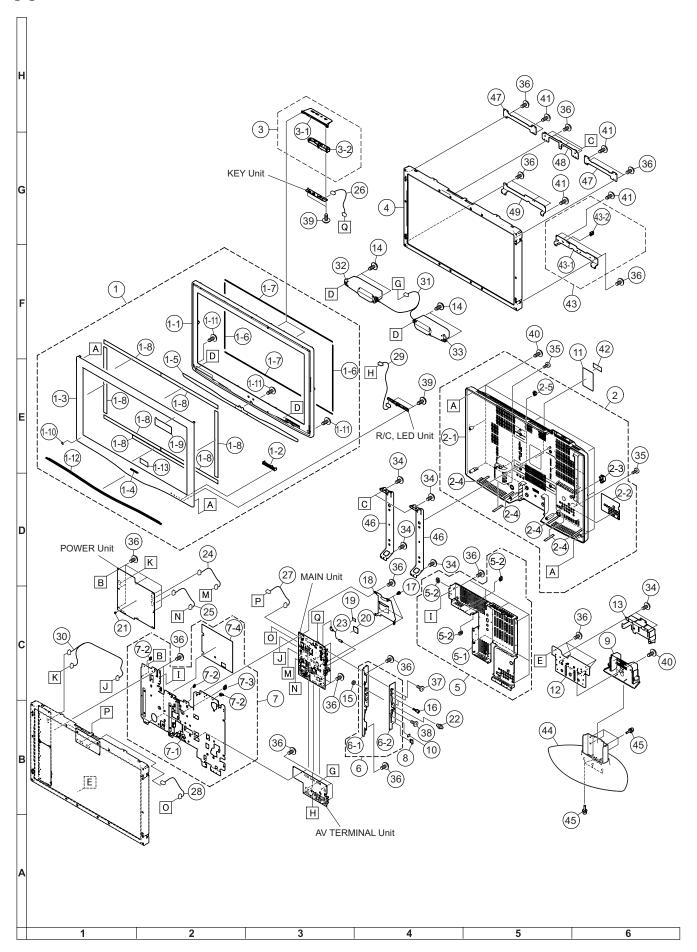
- [4] PACKING PARTS (NOT REPLACEMENT ITEM)
- [5] SERVICE JIGS (USE FOR SERVICING)

Parts marked with " $\triangle$ " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

## LC-C3242U

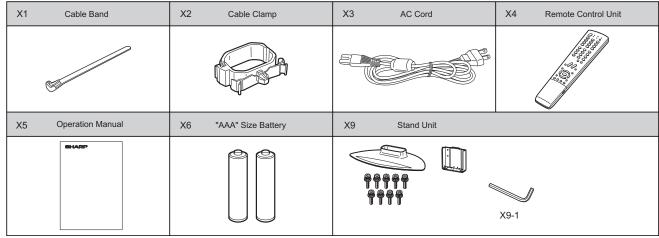
NO.	PARTS CODE	PRICE RANK		PART DELIVERY	DESCRIPTION
[1] LCD PANEL (NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.)					
N	R1LK315T3LZ50Z	EE	N	J	32" WIDE LCD Panel Module Unit

### [2] CABINET AND MECHANICAL PARTS



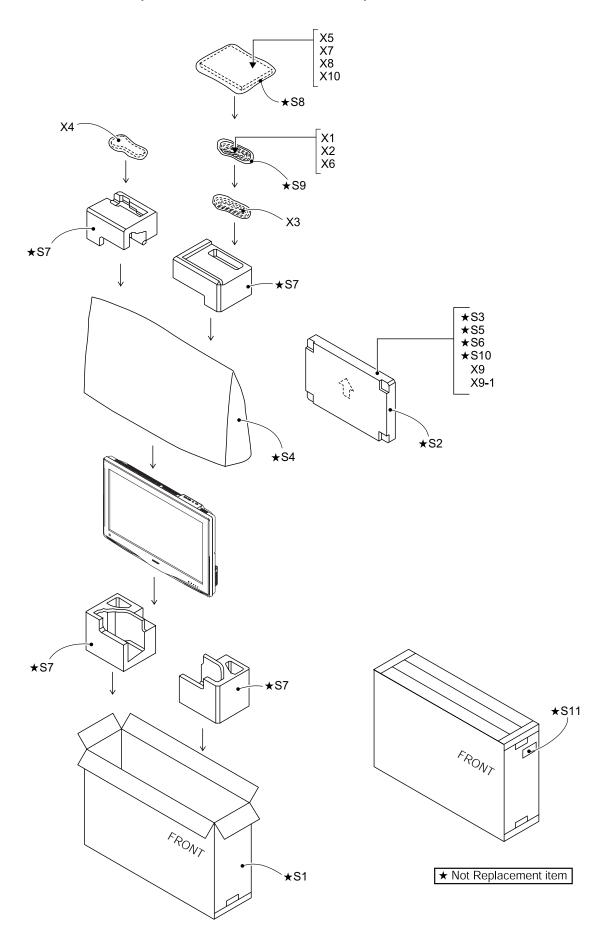
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION	
[2] CABINET AND MECHANICAL PARTS						
1	CCABAB612WJ04		N	Χ	Front Cabinet Ass'y	
1-1	Not Available	-		-	Front Cabinet	
1-2	Not Available	-		-	LED Cover	
1-3 1-4	Not Available	-	N	_	Front Cover	
1-4	Not Available HPNLSA100WJSB	AY		X	Badge, SHARP SP-Net	
1-6	Not Available	-			Spacer, x2	
1-7	Not Available	-		-	Spacer, x2	
1-8	Not Available	-		-	Double Tape, x7	
1-9	TLABZB392WJSA	AF		X	POP Label	
1-10 1-11	TLABZA635WJZZ XJPSN30P08XS0	AC AA		J	Label Screw (for Front Cover), x3	
1-11		AQ		X	Shaine Trim	
1-13	Not Available	-		_	Spacer	
2	CCABBA950WJ01	BL		Х	Rear Cabinet Ass'y	
2-1	Not Available	-	N	-	Rear Cabinet	
2-2	Not Available	-	N	-	Terminal Label	
2-3 2-4	LHLDWA057WJKZ Not Available	AE -	N	J –	Wire Holder Spacer, x6	
2-4	LHLDWA055WJKZ	AC	IN	J	Wire Holder	
3	CCOVAB929WJ01	AM		X	Top Cover Ass'y	
3-1	Not Available	-		-	Top Cover	
3-2	Not Available	-		-	Operation Button	
4	R1LK315T3LZ50Z	EE	N	J	32" WIDE LCD Panel Module Unit	
5	CSLDMB061WJ01	AX -		X -	MAIN Shield Ass'y	
5-1 5-2	Not Available LHLDWA102WJKZ	AB		J	MAIN Shield Wire Holder, x3	
6		AN	N	X	Jack Angle Ass'y	
6-1	Not Available	-	N	_	Jack Angle	
6-2	Not Available	-	N	-	Jack Indicator	
7		AZ	N	Χ	Tray Chassis Ass'y	
7-1	Not Available	-	N	-	Tray Chassis	
7-2 7-3	LHLDWA102WJKZ LHLDWA120WJKZ	AB AB		J	Wire Holder, x3 Wire Holder	
7-3	Not Available	A D		_	Barrier Sheet	
8	GCOVAA678WJKA	ΑE		J	SD Card Cover	
9	GCOVAB931WJKA	AL		X	Stand Area Cover	
10	HiNDPB715WJSA	AF		Χ	Terminal Label	
11	HiNDPC377WJSA	AH	N	X	Model Label	
12	LANGKA913WJM1	BC		X	Stand Fix Angle	
13 14	LANGKA914WJFW LX-HZA003WJFN	AL AC		X J	Stand Assist Angle Screw (for SP-BOX), x4	
15		AA		J	Nut	
16	NSFTZ0134CEFW	AD		J	Shaft, x2	
17	PCLiCA004WJKZ	AC		J	Rivet, x3	
18	PRDARA414WJFW	AK	N	Χ	Heat Sink	
19	PSPAZA635WJKZ	AC		J	Cool Sheet	
20 21	PSPAZA917WJKZ PSPAZB030WJKZ	AH AB		J	Cool Sheet Spacer	
22	QCNCWA496WJZZ	AK		X	Connector (F-RCA)	
2.2	QCNW-E249WJPZ	AH		Ĵ	Connecting Cord (ANT IN)	
24	QCNW-E257WJQZ	AH		Ĵ	Connecting Cord (PE)	
25	QCNW-E258WJQZ	AG		J	Connecting Cord (PD)	
26	QCNW-E266WJQZ	AF		J	Connecting Cord (KM)	
27 28	QCNW-E278WJQZ QCNW-E703WJPZ	AH		X	Connecting Cord (IV)	
28	QCNW-E703WJPZ QCNW-F250WJQZ	AX AL	N	X	Connecting Cord (LV) Connecting Cord (RA)	
30	QCNW-F300WJQZ	AL	N	X	Connecting Cord (IA-LA LB)	
31	QCNW-F316WJQZ	AG	N	Χ	Connecting Cord (SP)	
32	RSP-ZA215WJZZ	AY		X	Speaker (L)	
33		AY		X	Speaker (R)	
34	XBBS740P06000	AA		J	Screw (for ANG), x6	
35 36	XBBS930P06000 XBPS730P06WS0	A A A A		J	Screw (for CAB-B), x5 Screw (for PWB,ANG), x42	
37	XBPS830P06000	AA		J	Screw (for HDMI), x2	
38	XEBS930P08000	AA		J	Screw (for JACK)	
39		AA		J	Screw (for LED), x2 (for KEY), x2	
40	XEBS940P16000	AB		J	Screw (for CAB-B), x10	
41	XEBSN40P10000	AB		J	Screw (for PANEL), x4	
42		AD		X	No. Label	
43 43-1	CANGKA930WJ01	AL -	N	X -	Rug Angle Bottom R Ass'y Rug Angle Bottom R	
43-1	Not Available LHLDWA120WJKZ	AB	IN	J	Rug Angle Bottom R   Wire Holder	
44		7.0	N	X	Stand Unit	
45	Not Available	-	N	_	Screw (for Stand), x9	
46	LANGTA414WJM1	AP		Х	Center Angle, x2	
47	LANGHA052WJFW	AG		X	Rug Angle Top, x2	
48	LANGHA051WJFW	AG		X	Center Angle Pottom	
49	LANGKA929WJFW	AK		X	Rug Angle Bottom L	

## [3] SUPPLIED ACCESSORIES



[	NO.	PARTS CODE	PRICE	NEW	PART	DESCRIPTION				
	NO.	TAINTS CODE	RANK	MARK	DELIVERY	DESCRIPTION				
	[3] SUPPLIED ACCESSORIES									
	X1	LHLDWA083WJ00	AD		J	Cable Band				
	X2	LHLDWA131WJKZ	ΑE		J	Cable Clamp				
$\Lambda$	X3	QACCDA039WJPZ	AQ		J	AC Cord				
	X4	RRMCGA535WJSA	ΑY		Χ	Remote Control Unit				
	X5	TiNS-D085WJZZ	AN	N	Χ	Operation Manual				
	X6	Not Available	-		-	"AAA" Size Battery				
	X7	TCADEA208WJZZ	AD		Χ	Enquete Card				
	X8	TCAUHA263WJZZ	AD		Χ	Caution Card				
	X9	CDA i - A 3 3 2 W J 0 4		N	Χ	Stand Unit				
	X9-1	UKŌGLA001WJZZ	AK		Χ	Tool for Stand				
	X10	TGAN-A768WJZZ	AD		Χ	Guarantee Card				

## [4] PACKING PARTS (NOT REPLACEMENT ITEM)



NO.	PARTS CODE	PRICE RANK		PART DELIVERY	DESCRIPTION			
[4] PAC	[4] PACKING PARTS (NOT REPLACEMENT ITEM)							
S1	SPAKCD468WJZZ	_	N	-	Packing Case			
S2	SPAKFB119WJZZ	_		-	Stand Case			
S3	SPAKFB120WJZZ	-		-	Stand Pad			
S4	SPAKPA794WJZZ	-		-	Wrapping Paper (Monitor)			
S5		_		-	Mirror Mat Base			
S6		_		-	Mirror Mat Sup			
S7	SPAKXB306WJZZ	-		-	Packing Add.			
S8	SSAKA0101GJZZ	-		-	Polyethylene Bag			
S9	SSAKAA032WJZZ	-		-	Polyethylene Bag			
S10	SSAKHA035WJZZ	-	N	-	Polyethylene Bag (for Screw)			
S11	TLABKA009WJZZ	-		-	No. Label			
[5] SER	[5] SERVICE JIGS (USE FOR SERVICING)							
N	QCNW-D483WJQZ	AX		J	Connecting Cord (PE (PA) 12pin 100cm)			
N					MAIN to POWER Unit			
N	QCNW-E068WJQZ	AS		J	Connecting Cord (PD (MI) 6pin 100cm)			
N					MAIN to POWER Unit			
N	QCNW-F304WJQZ	ΑV		J	Connecting Cord (LA/LB 4p-8p 130cm)			
N					MAIN to INVERTER Unit			
N					Connecting Cord (LA 10p-14p 100cm)			
N					POWER to INVERTER Unit			
N	QCNW-E673WJPZ	BP		J	Connecting Cord (LV 30pin 100cm)			
N					MAIN to LCD CONTROL Unit			
N	QCNW-E674WJQZ	AS		J	Connecting Cord (SH 7pin 100cm)			
N					MAIN to LCD CONTROL Unit			

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